

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-11 have been examined. Claims 1-13 are all the claims pending in the application.

Formal matters

Applicant thanks the Examiner for acknowledging claim to foreign priority and receipt of a certified copy of the priority document.

However, the Examiner has not indicated the status of the drawings filed on November 13, 2003. Accordingly, Applicant respectfully requests the Examiner to accept the drawings in the next action.

Claim rejections -- 35 U.S.C. § 112

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite. Specifically, the Examiner argues that the word “separate” renders the claim indefinite. Applicant has amended claim 1 and respectfully requests the Examiner to withdraw the rejection.

Claim rejections -- 35 U.S.C. § 101

Claims 9 and 10 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. The Examiner maintains that claims 9 and 10 do not have 1) a useful result or 2) a tangible result.

Applicant has amended the claims to recite that the method is “for use in watermarking a moving image”, and respectfully requests the Examiner to withdraw the rejection.

Applicant has also added claims 12-13 directed to storing the extracted edges in a recording medium, and respectfully requests the Examiner to withdraw the rejection.

Claim rejections -- 35 U.S.C. § 102

Claims 9 and 10 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Simone et al. "Digital Watermarking Applied to MPEG-2 Coded Video Sequences Exploiting Space and Frequency Masking" (hereinafter Simone).

Applicant notes that the copy of the Simone article cited by the Examiner is undated. Accordingly, Applicant respectfully submits that the Simone article is not available under 35 U.S.C. § 102(b) and respectfully requests the Examiner to prove the date of publication of the Simone article.

In order to advance prosecution if the Examiner can prove the date of publication of the Simone article, Applicant traverses this rejection as follows.

Turning now to the substance of the Simone article, the Examiner argues that Simone, in the Abstract, Section 2.3, and Figs. 2 and 3, discloses every feature of claims 9 and 10. However, Applicant respectfully disagrees with the Examiner's position.

For example, claim 9 recites the feature of extracting edges from a contrast-adjusted frame. In the Abstract, Simone merely describes "exploitation" of "some space and frequency masking considerations". However, Simone does not explain what these considerations are or how they are applied. In Section 2.3, Simone describes adding to a DCT coefficient a quantity proportional to a quantization factor, an absolute value of the DCT coefficient, an activity factor,

and a visibility factor. To reject a claim under § 102, the prior art must show the identical invention in as complete detail as set forth by the claim. Thus, Applicant respectfully submits that Simone, at these cited portions, does not disclose extracting edges of the image frame, as recited by claim 9.

Claim rejections -- 35 U.S.C. § 103

Claims 1 and 11 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 2003/0033529 to Ratnakar in view of U.S. Patent No. 6,601,793 to Tewfik. Applicant respectfully traverses this rejection as follows.

For example, claim 1 recites the features of obtaining a global masking value and of obtaining a watermarked frame value by adding a watermark value weighed by the global masking value and a control variable to an original frame value. The Examiner maintains that the obtaining the watermarked frame value feature is taught by Ratnakar at paragraphs 14, 82 and 86. However, the Examiner admits that Ratnakar does not teach the claimed feature of obtaining the global masking value. To make up for this deficiency, the Examiner cites Tewfik at col. 4, lines 50-55 as teaching this feature. However, Applicant respectfully disagrees.

While Tewfik does teach determining a global masking threshold, it is noted that Tewfik does not teach the use of this threshold in any substantive way.

Ratnakar, at the cited portions, teaches an embodiment for inserting multiple watermarks into an image. In this method, the image contains a plurality of blocks, each block containing one of a first type of coefficient or a second type of coefficient. The method involves applying a

first watermark to a first pattern area of the image, and a second watermark to a second pattern area of the image, the watermarks being performed by one of several scrambling operations, including a AC masking operation.

Even though Tewfik may teach obtaining a global masking threshold, neither Tewfik nor Ratnakar suggest weighting a watermark value by the global masking value. That is, neither Raknakar nor Tewfik teach how to apply the global masking value in the novel way claimed by Applicant. Moreover, neither Tewfik nor Ratnakar suggest further modifying the weighting by a control variable. Accordingly, Applicant respectfully submits that the combination of Tewfik and Ratnakar is improper, and since (as acknowledged by the Examiner) neither Ratnakar nor Tewfik, standing alone, teach all the limitations of the claim, claim 1 is patentable.

Claim 11 recites similar features to claim 1, and Applicant respectfully submits that claim 11 is patentable for the same reasons.

Claims 2-8 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ratnakar in view of Tewfik in further view of Simone.

Claims 2-8 depend from claim 1, which has been shown above to be patentable over the Tewfik and Ratnakar combination. Simone does not cure the deficiencies of Ratnakar and Tekfik discussed above. As such, claims 2-8 are patentable based on their respective dependencies.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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